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ABSTRACT

Recent attempts to empirically validate psychoanalytic theory and its contemporary object relational constructs have turned to measuring the concepts with a variety of recently developed assessment scales. This paper reviews the 27 research studies which utilize instruments designed to assess object relations phenomena in subjects diagnosed with borderline personality disorder. It is noted that object relations theory views personality as developing from experiences in early childhood relationships that produce internal self and other representations. The borderline personality organization is seen as having advanced beyond merged self-object representations, but reflects impairment in the developmental level prior to the full integration of part self- and object-representations into whole representations. Fourteen assessment scales are delineated and their contributions to the understanding of object relational phenomena of borderline pathology are reviewed. The measures appeared generally to validate constructs of object relations theory related to borderline personality disorder in terms of diagnostic implications, qualitative descriptions, and therapeutic outcome. Further research with the instruments is recommended to increase confidence in validity levels and widen utilization by clinicians. (Author/LLL)

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# THE ASSESSMENT OF OBJECT RELATIONS PHENOMENA IN BORDERLINE PERSONALITY DISORDER

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A Doctoral Research Paper

Presented to

the Faculty of the Rosemead School of Psychology

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In Partial Fulfillment

of the Requirements for the Degree

Doctor of Psychology

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by

Eric Wayne Gustafson

August 1991

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THE ASSESSMENT OF OBJECT RELATIONS PHENOMENA

IN BORDERLINE PERSONALITY DISORDER

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ABSTRACT

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Recent attempts to empirically validate psychoanalytic theory and its contemporary object relational constructs have turned to measuring the concepts with a variety of recently developed assessment scales. This paper reviews the 27 research studies which utilize instruments designed to assess object relations phenomena in subjects diagnosed with borderline personality disorder. Fourteen assessment scales are delineated and their contributions to the understanding of object relational phenomena of borderline pathology are reviewed. The measures appear generally to validate constructs of object relations theory related to borderline personality disorder in terms of diagnostic implications, qualitative descriptions, and therapeutic outcome. Further research with the instruments is recommended to increase confidence in validity levels and widen utilization by clinicians.

# The Assessment of Object Relations Phenomena in Borderline Personality Disorder

## Introduction

Psychoanalytic theory has long been criticized for its lack of sound empirical support (Greenberg & Mitchell, 1983). One area of burgeoning interest within the psychoanalytic literature is that of object relations and its clinical applications. However, the validation of object relations theory, as with the broader psychoanalytic field, has been limited mostly to case study descriptions. The consulting room has been a valuable setting in the development of object relations theory, but it lacks the power of disconfirmation and construct validation necessary to integrate the data into a unifying theory, and thus gain adherence in the scientific community.

### Empirical Investigations of Psychoanalytic Theory

Diagnostic psychological tests (especially projective techniques) have had a central and pivotal role in the research on psychoanalytic concepts. David Rapaport's seminal work in the decades from 1940 to 1960 exhibited the reciprocal and mutually beneficial relationship between the concepts of psychoanalytic theory and diagnostic psychological testing (Rapaport, 1954; Rapaport & Gill,

1959; Rapaport, Gill, & Schafer, 1945). He found that psychoanalytic concepts afford a broad theoretical base for psychological assessment, and conversely that psychological testing provide a source for observations that lead to theoretical innovations and confirmation of many psychoanalytic concepts. Rapaport's contributions, however, were focused on the psychoanalytic concepts of his day; the economic, topographic and structural models of psychoanalysis and the study of ego functions (Blatt & Lerner, 1983a).

There have been important revisions and developments in psychoanalytic theory in the 30 years since Rapaport's contributions. These extensions of psychoanalytic theory include integrating it with (a) the concepts of object relations theory (Fairbairn, 1952; Guntrip, 1969; Loewald, 1962, 1970, 1979; Schafer, 1976; Winnicott, 1965); (b) a broader psychodynamically based developmental theory (Fraiberg, 1969; Freud, 1956; Jacobson, 1964; Mahler, 1968; Mahler, Pine, & Bergmann, 1975); and (c) a systematic psychology of the self (Balint, 1952; Kohut, 1971, 1977; Winnicott, 1958). These developments have been part of a theoretical shift away from a mechanistic, natural science model and toward a clinical theory focused on the concepts to the self and others in a representational world (Jacobson, 1964; Sandler & Rosenblatt, 1962). Recent developments in diagnostic psychological testing research

have run parallel to the shifts in psychoanalytic theory.

Sandler and Rosenblatt (1962) were pioneers in suggesting empirical investigation to validate the psychoanalytic theory of an internal representational world (Hartman, 1950; Jacobson, 1964; Kernberg, 1966) and its manifestations in interpersonal functioning, particularly in the transference relationship. Following Freud's differentiation between the internal and external world of the child, Sandler and Rosenblatt described a process of development (cognitive, perceptual, and affective) in which an increasingly complex and organized set of representations of external reality develops within the mind of the child. This internal representational world of the child, they noted, does not have a one-to-one correlation with reality, but develops out of the child's wishes, perceptual distortions and aggression. A major tenet of the object relations branch of psychoanalytic thinking has been that the quality of the developing representational world in children strongly influences the patterns and quality of interpersonal functioning in the adult years. Prior to the work of Sandler and Rosenblatt there had been very limited empirical research on the object relational constructs of self and object representations and how they influence the experiencing of interpersonal relationships. Object relations theory had evolved instead largely from the methods of clinical observation and case material.

Nevertheless, there was considerable interest and theorizing generated about self and object representations from early assessment research.

Interest in the diagnostic assessment of mental representations dates back almost 60 years to Rorschach's (1923) earliest blind test analyses. The content of human percepts on the Rorschach as reflecting self and object representations was emphasized by Hertzman and Pearce (1947). The study of mature object relations (e.g., empathy) has long been the focus of diagnostic techniques, such as Klopfer and associate's work on the human movement response on the Rorschach (B. Klopfer, Ainsworth, G. Klopfer, & Holt, 1954). Mayman (1967) and Schactel (1966) described the use of the Rorschach to assess the qualities and themes of self and object representations. This led to the development of special scales to assess object representational levels (Blatt, Brenneis, & Schimek, 1976; Urist, 1977).

Interest spread beyond the use of the Rorschach, prompting the development of measurement indices of object relational phenomena applied to a variety of data sources. Phillipson (1955) devised the Object Relations Technique, a projective device using diffuse drawings, as a way to measure an individual's repertoire of mental representations. Mayman (1968) developed the Early Memories Test theorizing that the depiction of relationships within

early memories conveys aspects of the subject's characteristic modes of organizing self and object representations. Mayman's approach was applied to autobiographical data as well as to more traditional projective tests, such as the Thematic Apperception Test (TAT) and the Rorschach (Urist, 1976, 1977). Also, Krohn (1972) developed a similar technique utilizing the manifest content of dreams to assess self and object representations.

The impetus to develop object relational assessment instruments was the validation of psychoanalytic constructs. Other developments have included measures based on (a) the Thematic Apperception Test (Westen, 1985); (b) interview data (Bellak, Hurvich, & Gediman, 1973); (c) newly devised projective instruments (Burke, Summers, Selinger, & Polonus, 1986; Schmiedeck, 1974); and (d) parental representations (Blatt, Wein, Chevron, & Quinlan, 1979). There have also been newly created Rorschach scales on structural dimensions (Burke, Friedman, & Gorlitz, 1988) as well as thematic content scales of object relational phenomena, such as separation-individuation issues, applied to the Rorschach (Coonerty, 1986; Cooper, Perry, Hoke, & Richman, 1985; Lerner, Sugarman, & Barbour, 1985) and other projective and interview data (Summers, 1978).

Object Relations Overview

The common thread throughout the history of the developing clinical assessment of object relations phenomena

has been to focus on the internal basis for an individual's capacity to experience human relatedness. The fundamental theory on which this assessment rests is that past relations give rise to the development of internal psychic structure.

Object relations theory views personality as developing from experiences in early childhood relationships that produce internal self and other representations. A central focus of this review is on empirical investigations on the concept of the "other" in the representational world. The term "object" is the psychoanalytic term for the intrapsychic structure, or representation, of the person or "other", as opposed to the "self" (Kernberg, 1976). Object representations, then, are the child's complex mental schemata of significant others encountered in reality which shape and direct future relationships with others (Blatt, 1974; Sandler & Rosenblatt, 1962). That is, these are conscious and unconscious ideas and other mental content (affectively loaded images/experiences) which serve as templates for contemporary experience. In the realm of "real" relationships between self and others in the external world, the individual perceives, processes and interacts with the present experience in the context of the internal organization from the past. The individual makes sense of interpersonal experience by engaging the psychological processes which register and organize mental representations of self and others.

Although theorists and clinicians often refer to levels of object relations as unitary phenomena (Greenberg & Mitchell, 1983) from developmentally immature to mature, object relations are actually a collection of cognitive and affective functions and structures. Included are the variety of ways of representing people and inferences about the causes of others' feelings, behaviors, wishes, conflicts and so forth. Researchers noted recently that

> the concept of general levels of object relations is clinically an indispensable heuristic, but these levels should be understood as being composed of several interdependent but distinct developmental lines that differ in their maturity and quality among individuals as well as within a single individual at any given time. (Westen, Lohr, Silk, Gold, & Kerber, 1990, p. 355)

Urist (1980) stated previously that the assessment of object relations involves

> an evaluation of intrapsychic functioning, not to social behaviors per se. In such an assessment we are interested in observing the ways in which feelings and conscious and unconscious ideas about the self, about other people, and about the relations between self and others are organized in an individual's mind. (p. 821-822)

With normal development these internal mental structures would grow more complex, differentiated and flexible according to more or less definable stages of development. Psychopathology results from disruption of this pattern of psychological growth. Theoretical and clinical explorations that have adopted the object relations viewpoint have generated explanatory hypotheses for such diverse psychopathology as schizophrenia, depression,

narcissistic disorders and borderline personality disorder. The assessment of psychopathology has been linked increasingly with developmental theory and the individual's capacity to experience self and other within relationships. The theoretical literature points to the various qualities of a patient's repertoire of mental representations as signifying definable points along a developmental continuum (Kernberg, 1966).

The importance of assessing the patient's developmental level of object relationships for diagnostic and therapeutic purposes is assumed in contemporary psychodynamic treatment. Therefore, the purpose of developing instruments for the assessment of object relations has been to produce more objective, reliable means of measuring the quality and levels of object relating than the traditional methods of conducting clinical interviews and observing response to treatment.

Object relations theory has proven to be a popular and fertile heuristic theory for psychoanalytic clinicians, but thus far has failed to induce a proportionate amount of empirical investigation into its theory, assumptions, or corollary implications. One main obstacle to empirical research has been the difficulty of assessing object relations in a manner consistent with any coherent theoretical position and with accepted standards of psychological measurement.

The Borderline Concept

The psychological processes underlying the interpersonal pathology (i.e., their distorted object relations) of patients with borderline personality disorder have been conceptualized in various ways by different theorists. Most contend that disturbances in the first 3 years of life lead to patterns of developmentally primitive modes of relating in adulthood (Kernberg, 1975; Masterson, 1976).

The quality of relating of those with borderline personality disorder has been described as unstable, superficial and lacking internal connectedness. This internal sense of disconnectedness tends to prompt the development of sudden, pressurized and intense relationships characterized by clinging dependency and idealization, followed by devaluation of the object. Their efforts at gratification in relationships are primitive, manipulative and lacking in mutuality. British object relations theorists such as Klein, Fairbairn, and Winnicott attributed the source of these difficulties to "the persistence of non-metabolized early pathological object relationships" (Kernberg, 1975, p. 161).

Kernberg (1975) has postulated a spectrum of psychopathological disorders based on varying levels of developmental impairment and degree of differentiation of self and object representations. Psychotic patients, in

Kernberg's view, reflect impairment at the level of merged self-object representations. The borderline personality organization is seen as having advanced beyond merged self-object representations, but reflects impairment in the developmental level prior to the full integration of part self- and object-representations into whole representations.

Testing such theoretical constructs correlating the object relational world with the borderline diagnosis and implications for treatment requires the use of reliable and valid measures of object representations. Recent efforts in the empirical literature to assess object relational phenomena have attempted to provide measures which validate existing hypotheses or contribute to further hypotheses in the development of clinical theory. Many of the investigations have included groups of borderline subjects. These studies are the focus of this review.

Object Relations Assessment of Borderlines

Assessment of the object relations theory of personality requires instrumentation capable of translating its concepts into operationally definable terms. In order to accomplish this task, the instruments must reliably and validly measure the experience of relating to others. Over the last 20 years, a growing number of researchers have explored psychoanalytic theory through the empirical investigation of object representations elicited from projective test data.

The borderline personality has received considerable attention in the psychological test literature. Stern (1938) suggested that borderline psychopathology is even more apparent in psychological test performance than in clinical interaction. Knight (1954) noted the presence of cognitive peculiarities in borderlines that were not apparent in clinical interviews. In fact, Rorschach himself expected that diagnosis "in the borderland" between schizophrenia and the neuroses would be the area of greatest utility of his test (Fried, 1980).

The current task of a developmental assessment of object relations involves measuring not so much an individual's ideas and feelings about others, but rather how the individual experiences and organizes these ideas and feelings. The purpose of measuring object relations is to assess internal structure, affect and thematic content rather than external relationships. It is necessary to distinguish conceptually between external relationships in the real world and the internal images or mental representations of those relationships.

In reviewing the literature it becomes clear that the assessment of object representations is multidimensional. That is, the task of assessment is to evaluate object representations in terms of various discrete qualities of the individual's experience of self and others. It is the qualitative dimensions that reflect the unfolding of object

relations through developmental stages. For example, the richness and complexity of mental representations, the associated affective quality and the stability or enduring quality of self and object representations are qualitative dimensions that have important diagnostic significance.

Part of the difficulty in assessing object relational phenomena in those with borderline personality disorders is the confusion between the structural diagnosis of borderline and the more limited descriptive diagnosis of the DSM III-R. It is important to note the distinction between the terms borderline personality organization and borderline personality disorder. The former is a concept developed by Kernberg (1975, 1976) and refers to a specific level of pathological organization among intrapsychic personality structures. Subsumed within this level are a variety of DSM-III-R disorders (e.g., schizoid, narcissistic, paranoid and borderline personality disorders) identifiable on the basis of observable behavior in contrast to the analysis of intrapsychic structure. In theory, all patients diagnosed as having borderline personality disorder would probably reflect borderline personality organization, but not all patients with borderline personality organization would necessarily meet DSM-III-R criteria for personality disorder. This paper reviews studies which assess the object relational phenomena of those defined either within the broader diagnostic scope of borderline structure or

narrower definition of borderline personality disorder.

## Purpose

The purpose of this paper is to (a) review the status of the empirically designed, published studies of object relations phenomena related to individuals diagnosed as borderlines; (b) delineate the instruments developed; and (c) summarize their contributions to the validation of contemporary psychoanalytic theory and constructs. To be included, a study was required to have a distinct sampling of subjects diagnosed as "borderline" or "borderline personality disorder" for purposes of comparison and analysis. A study must have utilized at least one measure purporting to assess "object relations" or "object representations" (or a measure assessing an object relational component or commonly recognized theme such as "separation-individuation," or "boundary disturbance") as a dependent variable. Case studies and doctoral dissertations were not included. Studies that failed to report valid statistical properties were excluded. Also excluded were measures of defensive structure or mechanisms, reality testing, ego states or disturbances, psychosexual conflicts, affect regulation, cognitive style or other psychoanalytic concepts not necessarily encompassed in object relations theory. The final sample included 27 studies meeting the above criteria.

## Measures

A variety of instruments have been developed to assess object relations phenomena utilizing both Rorschach and non-Rorschach data. The measures utilized in the research with borderline samples are delineated below.

### Object Representations on the Rorschach

Empirical research on object relations has focused primarily on the examination of Rorschach responses, as have studies of borderline object relations. The traditional Rorschach scoring procedures have often been used to assess object relations. The frequency of human movement (M) responses given in a Rorschach protocol has been used as an index of capacity for empathy, and the accuracy level of the form qualities of M and H (human content) responses gives an indication of quality of object representations (Blatt & Ritzler, 1974; Blatt, Wild, & Ritzler, 1976). Also, the frequency and types of human or quasi-human content (H,Hd,[H],or [Hd]) responses have led to inferences about an individual's object relational capacity (Blatt & Berman, 1984; Blatt, Brenneis, Shimek, & Glick, 1976; Blatt & Lerner, 1983). Rapaport, Gill, and Schafer (1945) suggested that the tendency to see whole human figures is a reflection of a free and productive interest in others. On the other hand, the tendency to see only parts of human figures, or Hd, reflects an anxiety-ridden, cautious and wary interest in others.

In an outcome study by Hertzman and Pearce (1947), psychotherapy patients were given a Rorschach prior to the beginning of their treatment. Six months into treatment the investigators found that 75% of all human figures perceived on the pretreatment Rorschachs had identifiable personal meaning to the patients. It became apparent, therefore, that the human responses on the Rorschach were significantly related to the subject's actual object relationships.

Klopfer et al. (1954) theorized that the human movement response (M) on the Rorschach is indicative of the individual's ability to view people as an important element in the world as well as the capacity to feel empathy for others. Klopfer and associates suggested that this empathic capacity is related to the ability for good interpersonal functioning. They also suggested that the H and Hd responses depict the quality and content of the individual's previous object relationships.

Expanding on Klopfer's work, Pruitt and Spilka (1964) developed an Empathy-Object Relations Scale (RE-ORS) based on Rorschach human movement and human content responses. The scale provides a global score of the subject's capacity for empathy and object relations. In Pruitt and Silka's research on group therapy treatment, increases in the RE-ORS scores were related to independent assessments of improvement. The investigators concluded that the RE-ORS demonstrates an adequate degree of reliability and suggested

that the Rorschach might be used to measure changes in object relational constructs, such as empathy, during the course of treatment.

Finally, Exner (1986), who has conducted an extensive amount of research on the Rorschach, and has produced an extensive administering, scoring, and interpreting system has summarized much of the research on the human content and human movement responses. He reported that the absence of a human percept response may be a pathological finding that appears to signal a distinct lack of interest in, and perhaps, detachment from, others. Exner noted that the percentage of whole human form responses (Pure H) were indicative of whether the basis for the subject's views of and interest in the social environment originated from fantasy or real experiences. He found that schizophrenic and character disordered patients gave more fictional or mythological character responses [(H) and (Hd)] than depressed patients. Exner theorized that these responses suggest a detachment from the real world and evidence of an investment in fantasy. He also emphasized the importance of evaluating the content of the human movement response, M, as a qualitative indicator of human relatedness. He found in his studies that the type of actions of the figures on M responses, as well as whether they involved single or multiple figures, real or unreal figures, aggressive or cooperative action, passive or active movement, and so

forth, gave important information about the subject's interpersonal and behavioral effectiveness.

In sum, the works of Exner (1986), Hertzman and Pearce (1947), Klopfer et al. (1954) and Pruitt and Spilka (1964) are representative of a number of studies which have demonstrated that the evaluation of the human response on the Rorschach provides important information regarding the constructs of object representations as well as the pathological distortions in personality development and organization.

Much of the current research on object relation phenomena involves the interpretation of human figure responses on the Rorschach, and elaborates further on the traditional scoring systems. Many of the other research studies reviewed in this paper have expanded this concept of studying the perception of human figures and interactions to other tests such as the Thematic Apperception Test (TAT) or other specially constructed measures, such as the Comprehensive Object Relations Profile (CORP) and the Object Representations Scale for Dreams (ORSD).

The use of nontraditional measurement of Rorschach protocols has been more common in the last 30 years of assessing object relations phenomena, especially in the study of borderline object relations. Part of the reason for this is that the traditional scoring methods employed by Rappaport and others with systems such as Klopfer's were

unable to give a clear, reliable or comprehensive diagnostic picture of object relations for borderline subjects. Since then, most researchers and clinicians assessing object relations from Rorschach responses have used one or the other of two coding systems developed by two major research teams.

Sydney Blatt's team at Yale University developed a coding system in the mid-1970s, and Martin Mayman at the University of Michigan developed a system which was first formulated in the late 1960s and was expanded and formalized by Urist and others in the mid-1970s. Each research team sought to integrate the acquired data about the human response on the Rorschach within the more comprehensive framework of object relations theory and cognitive developmental psychology (Piaget, 1954; Werner, 1948).

Yale Research Team: Developmental Analysis of the Concept of the Object (DACOS). Blatt's research group at Yale University developed a scoring system emphasizing a developmental/structural perspective of cognitive functions in the assessment of capacity for object relations and object representations (Blatt, Brenneis, Schimek, & Glick, 1976). The theory behind their detailed structural scoring system was drawn primarily from Werner's (1948) notion of the individual's developmentally increasing capacity for articulation, differentiation and integration of object concepts.

The Blatt system evaluates the more formal cognitive dimensions of an individual's inner object relations. The measure, called the Developmental Analysis of the Concept of the Object (DACOS), examines responses depicting human and quasi-human figures (such as monsters) for the affective nature of the interaction of perceived figures (whether malevolent or benevolent), and a number of cognitive qualities, such as degree of articulation of the representation and the accuracy and appropriateness of the elaborations.

Of all the published scoring systems for the Rorschach based on object relations theory (Blatt, Brenneis, Schimek, & Glick, 1976; Burke, Friedman, & Gorlitz, 1988; Coonerty, 1986; Hatcher & Krohn, 1980; Lerner & Lerner, 1980; Lerner, Sugarman, & Barbour, 1985; Mayman, 1967; Pruitt & Spilka, 1964; Urist, 1977), it is Blatt's system that has been used most consistently in empirical investigations and follow-up studies. This scoring system is unique in that it represents one of the few avenues to assess empirically the relationship between thought organization and object relations.

Reliability scores for Blatt's measure have been reported by a number of researchers (Blatt & Berman, 1984; Blatt, Wild, & Ritzler, 1976; Lerner & Lerner, 1983; Lerner & St. Peter, 1984a, 1984b; Spear & Lapidus, 1981; Spear & Sugarman, 1984; Stuart et al., 1990) as well as by the

authors in their original study (Blatt, Brenneis, Schimek, & Glick, 1976). Interrater reliability scores have ranged from a low of 75% for the perceptual articulation subscale to a high of 96% for the differentiation subscale. The scores generally fall within a range of .85 to .95. Overall, the reliability scores for this measure appear acceptable, and the reliability of the various subscales seems to be replicated consistently. Nine studies utilizing this instrument included borderline samples and otherwise met the criteria for inclusion in this review.

Mayman's Research Team: Mutuality of Autonomy Scale (MOAS). The other common Rorschach-based measure is the Urist (1977) scale known as the Mutuality of Autonomy Scale (MOAS). This scale has its roots in the work of Kohut (1966, 1971, 1977), Kernberg (1966, 1975, 1977), and Mahler (1968), thus reflecting self psychology, ego psychology, and object relations theory. It focuses on the individual's developmental movement from symbiosis toward separation-individuation, as elaborated by Mahler (1971).

Urist's work, along with that of colleagues Krohn and Ryan at the University of Michigan, springs from Mayman's (1967) research focused on the "thematic" components of object interactions. The Michigan group has used a variety of projective data, including not only Rorschach percepts, but also early memories and dreams as representations of prototypical paradigms of inner object relations (Krohn,

1974; Krohn & Mayman, 1974; Mayman, 1967, 1968; Mayman & Faris, 1960; Ryan, 1970). The group has developed several assessment instruments, also based primarily on the work of Mahler (1968) and Kernberg (1966, 1975, 1976), for measuring the level of an individual's interpersonal capacity. For example, in Krohn's Object Representation Scale for Dreams (ORSD), an advanced level of object representations is characterized by themes of intimacy, emotional sharing and mutuality of relations, in contrast to a more primitive level highlighted by issues of isolation, loneliness and/or malevolent interactions.

The Mutuality of Autonomy Scale (MOAS), applied to the Rorschach, measures the extent to which objects are viewed as having a stable, enduring, autonomous existence with respect to each other. On the MOAS, Urist (1977) reported interrater reliability scores of .52 for exact agreement, .66 for agreement within 1/2 point, and .86 for agreement within 1 scale point. Other investigators have shown reliabilities of exact agreement ranging from .58 to .90 and 1-point agreement from .72 to .98. A recent summary of the reliability data on the MOAS indicated a range of .70 to .90 for exact agreement and uniform figures above .85 for 1 point differences (Tuber, 1989). Although much research has been conducted utilizing the MOAS, only one study (Spear & Sugarman, 1984) met the criteria for inclusion in this review. Part of the reason for its limited use with

borderline populations lies in the fact that validation studies have shown the MOAS to be less discriminating than the DACOS. It may also be an indicator of broader pathological functioning and not primarily object relations. Finally, other thematic scales based on the format have tended to replaced MOAS.

Psychoanalytic Rorschach Profile (PRP). Burke, Friedman, and Gorlitz (1988) recently developed a Rorschach instrument called the Psychoanalytic Rorschach Profile (PRP) that integrates drive, ego and object relations theory. The authors believe their scale overcomes the limitations of other psychoanalytic research approaches by (a) providing a more comprehensive analysis of psychodynamic dimensions in Rorschach imagery, (b) not restricting scoring criteria to human representations only, and (c) assessing both the content and structure of the responses. The PRP consists of 10 scales measuring impulse, ego structure and object relations. The object relations scales include Differentiation, Mutuality, and Animation. The Differentiation scale evaluates the physical relationship between boundary surfaces. The Mutuality scale rates the degree and quality of emotional relatedness in the interaction between objects. The Animation scale measures the degree of animation attributed to objects and whether an object is perceived as a whole or part form. In their pilot study, reliability coefficients ranged from .59 to .92, with

all three object-relations scales obtaining coefficients of .78. It should be noted, however, that this is a broad-based psychoanalytic assessment of an individual, and not just an object relations measure. The single published study on this instrument (Burke et al., 1988) included a borderline sample of five cases. Such a small number of subjects did not allow for the utilization of multivariate statistical analyses and interscore correlations, and limited the analysis of overall profile patterns demonstrated by diagnostic groups.

Separation-Individuation Theme Scale (SITS). In an attempt to test Mahler's theory of borderline development as originating in the separation-individuation preoedipal period, Coonerty (1986) developed the Separation-Individuation Theme Scale (SITS). This scale evaluates Rorschach protocols for the presence of themes related to the separation-individuation or preseparation-individuation developmental periods. Subthemes in the preseparation-individuation category include Internal Responses and Boundaryless Responses. Subthemes in the separation-individuation category include Early Differentiation, Practicing Phase, and Rapprochement. Reliabilities were reported to be between 86% (for untrained raters) and 96% (for trained raters).

Coonerty's development of the SITS followed from Mahler and Kaplan's (1977) recommendation that the entire

separation-individuation process be studied as it relates to adult psychopathology. A developmental failure at the task of separation-individuation, particularly at the rapprochement crisis, has been hypothesized as the primary explanation of the borderline personality disturbance. But Mahler and Kaplan cautioned against ascribing later pathology to one focal point on the separation-individuation continuum. They suggested that failure at the rapprochement crisis could be seen as the culmination of earlier disturbances in development. Therefore, a variety of separation-individuation themes would be expected within the borderline range of pathology. It would be expected as well that separation-individuation themes are more prominent in borderline personality disorder than in other pathological disorders. Coonerty's (1986) study was the only one which met the criteria for inclusion in this paper.

Rorschach Empathy-Object Relationship Scale (RE-ORS). Pruitt and Spilka (1964) developed this scale based on the theory that human content (H) and human movement (M) responses on the Rorschach are indicators of empathy and the capacity for effective relatedness. The scale orders human contact in a hierarchy from the most realistically delineated to the more alien representations of human interaction. Its dimensions include Humanness, Sex Specification, Temporal-Spatial considerations and Movement. Relatively low reliability coefficients of .66 and .59 were

reported in Pruitt and Spilka's original study. The scale has been utilized infrequently since it has been superseded by other, more complex instruments. Frieswyk and Colson (1980) was the only study which utilized the RE-ORS in the assessment of a borderline sample. Pruitt and Spilka employed the RE-ORS as one of the object relational measures of global improvement at termination of hospital treatment.

Symbiotic Phenomena Content Scale (SPCS). Recently, Hirshberg (1989) developed the Symbiotic Phenomena Content Scale (SPCS) as a Rorschach assessment of the intensity and nature of core separation conflicts. It measures three classes of content: imagery of symbiotic togetherness, imagery of separation, and imagery of counter-symbiotic protection. Hirshberg reported interrater reliability kappa coefficients for content scoring of .76, development level scoring of .91, and integrity scoring of .74. The only published research study to have utilized the SPCS was the pilot study by Hirshberg (1989) in which a sample of eating-disordered women was divided into borderline and nonborderline groups and their images of symbiosis and separation analyzed.

Rorschach Transitional Object Scale (RTOS). Rooted in Winnicott's (1953) concept of transitional phenomena as important in the development of object relational capacity and quality, Cooper (1983) developed the Rorschach Transitional Object Scale (RTOS) to measure the object

relational phenomenon of transitional relatedness. The Rorschach TOS rates five major features including; (a) relating percepts as real and comforting objects, (b) treating color percepts as concrete objects, (c) incorporating the cards into one's own experience, (d) changing the nature of the cards and/or their construction, and (e) treating the cards as real objects. In the one published study utilizing a borderline sample, Cooper, Perry, Hoke, and Richman (1985) found a Pearson product-moment correlation on interrater reliability of $r$ = .71. The validity of this scale should be considered as untested.

Non-Rorschach Measures of Object Relations

On the premise that Rorschach measures provide only a crude index of object relations and are relevant to only a limited number of object relations dimensions, recent measures have been developed which broaden the research base.

Westen Research Team: Object Relations and Social Cognition Scale (ORSCS). One set of non-Rorschach measures has been developed by Westen and his colleagues at the University of Michigan. Derived from clinical observation, object relations theory and research, and research in developmental social cognition (Westen, 1991a), these scales have been applied to various forms of projective and nonprojective data, including (a) TAT responses (Westen, Lohr, Silk, & Kerber, 1990), (b) fantasy narratives (Westen

& Segal, 1988), and (c) early memories, psychiatric interviews, and actual psychotherapy transcript data (Westen, Barends, Leigh, Mendel, & Silbert, 1988).

The Westen group delineated four dimensions of object relations on their Object Relations and Social Cognition Scale (ORSCS) which they report can be reliably and validly assessed from the variety of data sources mentioned above (Westen, 1990). The dimensions are:

> complexity of representations of people (tendency to represent people in rich and elaborate ways and to distinguish clearly their subjective experience and points of view), affect-tone of relationship paradigms (affective quality of the object world, from malevolent to benevolent), capacity for emotional investment in relationships and moral standards (need-gratifying orientation to the object world versus investment in values, ideals and committed relationships) and understanding of social causality (tendency to attribute causes of behaviors, thoughts and emotions in complex, logical, accurate and psychologically minded ways). (Westen, 1990, p. 677)

In his manual, Westen (1985) reported uncorrected reliability coefficients ranging from .75 to .95. Subsequent studies have reported interrater reliabilities ranging in the upper .80s to mid .90s (Westen, Huebner, Boekamp, Lifton, & Silverman, 1989; Westen, Lohr, Silk, Gold, & Kerber, 1990; Westen, Silverman, Lifton, & Boekamp, 1989). The scales have been validated in a variety of ways (Westen, Ludolph, Lerner, Ruffins, & Wiss, 1990) and have been found to predict various criterion groups.

This instrument, most commonly used with the TAT, appears to be a significant contribution to the assessment

literature on object relations phenomena. The TAT is one of the most promising measures to elicit object representations, and the ORSCS scoring system is generating much empirical research related to object relations theory. Three of these current studies (Westen, Lohr, Silk, Gold, & Kerber, 1990; Westen, Ludolph, Lerner, Ruffins, & Wiss, 1990; Westen, Ludolph, Silk, et al., 1990) measure borderline disorders specifically and thus were included in this review.

Comprehensive Object Relations Profile (CORP). Another research team (Burke, Summers, Selinger, & Polonus, 1986) at Northwestern University Medical School recently devised a semi-projective instrument to measure object relational dimensions called the Comprehensive Object Relations Profile (CORP). The team attempted to design an instrument that would more directly measure an individual's experience of interpersonal relationships. The purpose was to provide an alternative to the limitations of previous research that utilized noninterpersonal stimuli such as the Rorschach. The investigators noted that the Rorschach, a relatively unstructured assessment device, does not necessarily engage interpersonal dynamics, and therefore fails to optimally reflect object representations.

The CORP is a semi-structured projective instrument consisting of six vignettes. Each vignette includes an interpersonal conflict situation and a set of questions

designed specifically to assess three object relational dimensions: Object Constancy, Object Integration and Empathy (which has two subscales--Subjectivity and Appreciation). In the original study, median reliability scores ranged from .71 to .87 for the subscales, and reliability for the total score was .90. Test-retest correlations fell within the .60 to .80 range. One study (Burke et al., 1986) met all of the criteria for inclusion in this review.

Object Representation Scale for Dreams (ORSD). As noted above, Mayman and his colleagues developed a measure analyzing dream reports which came to be called the Object Representation Scale for Dreams (ORSD) (Krohn, 1972; Krohn & Mayman, 1974) based on developmental object relations theory (Mahler, 1968). Their purpose in developing this instrument was to assess the thematic content of object relations. The measure has been applied to dream reports, early memory reports, and Rorschach percepts. It assesses the individual's perceptions of others as fragmentary, absent and alienated, at one extreme, and complete, differentiated and alive at the other.

Using a variety of data sources, Krohn and Mayman (1974) reported interrater reliabilities ranging from .58 to .79 for exact agreement and from .74 to .89 for agreement within 1 scale point. Spear (1980) reported an exact agreement rate of 83% for the ORSD applied to Rorschach

data, and 80% when applied to dreams. Ryan's (1970) slightly modified scale, used exclusively with early memories, reported reliabilities of .80 and .86 (Ryan & Bell, 1984; Ryan & Cicchetti, 1986). Four studies (Frieswyk & Colson, 1980; Hymowitz, Hunt, Carr, Hurt, & Spear, 1983; Spear, 1980; Spear & Lapidus, 1981) included in this review have utilized the ORSD to measure themes in object relationships with dream reports and Rorschach data.

Bellak's Ego Function Assessment (EFA). In an attempt to provide an alternative to the use of projective content of dreams, memories or apperceptions in assessing quality of object relations, Bellak, Hurvich, and Gediman (1973) developed a procedure called the Ego Function Assessment (EFA). This is a semi-structured clinical interview measure based in ego psychology theory. It covers 12 areas of ego functioning, one of which is object relations (Bellak & Goldsmith, 1984; Bellak et al., 1973). It was developed from the theory that the ego function of object relations can be discerned from patients' describing their experience of relationships, how they conduct these relationships and the way they experience themselves in relation to others.

The measurement of object relations is only a minor portion of the extensive interview procedure of the EFA. However, the instrument has been an important contribution to the assessment literature by providing critical construct areas to be included when evaluating object relations, as

well as examplifying the interview data-based measure as an additional testing format. The instrument has four subscales for object relations, including: (a) Degree and kind of relatedness, (b) Primitivity-maturity, (c) Others perceived independently, and (d) Object constancy.

In terms of reliability, the original 1973 study reported interrater reliability of .83 for object relations. Dahl (1984) reported exact agreement at 24%, agreement within 1 point at 67%, and agreement within 2 points (on an 8-point scale) of 86%. A reliability coefficient of .55 was reported by Ciompi, Ague, and Dauwalder (1984). It should be noted that these reliability figures are not strong. In fact, one study (Coyne et al., 1984) reported acceptable reliability on only two of the four object relations scales. Only three studies (Goren, Kretsch, Gofer, & Wasserman, 1985; Kretsch, Goren, & Wasserman, 1984; Kretsch, Goren, & Wasserman, 1987) provided sufficient descriptive statistics on the object relations portion of the test, as well as utilized a borderline sample, to meet the criteria for inclusion in this review. However, the results are viewed as only preliminary because of the low reliability figures.

Bell Object Relations Inventory (BORI). Working from Bellak's theoretical framework and description of object relations ego functioning, Bell, Metcalf, and Ryan (1979, 1980) constructed a true-false self-report questionnaire of items adapted from patients' descriptions of their

experience of relationships and their characteristic patterns of relating. This forerunner of the Bell Object Relations Inventory (BORI) produced a single object relations score. But because the theory suggested that object relations was a multidimensional construct (Urist, 1980), extensive factor analyses of the self-report items were conducted producing the four subscales used in the current instrument. The factors delineated by the subscales had been interpreted to be underlying dimensions of object relations, and have been confirmed in replication studies (Bell, Billington, & Becker, 1986; Bell, Billington, Cicchetti, & Gibbons, 1988). The four subscales are: Alienation (Aln), Insecure Attachment (IA), Egocentricity (Egc) and Social Incompetence (SI). Split-half reliabilities were reported in the original factor analytic study (Bell et al., 1986) to be between .78 and .90 on the factors measured by the subscales. Two studies (Bell et al., 1986; Bell et al., 1988) utilizing this measure included a borderline sample and met the other inclusionary criteria for this review.

Early Memories Test. A number of studies have employed various forms of measures based on an individual's report of early memories as projective data for assessment of object relations. Developed by Mayman (1968), empirical research on the Early Memories Test utilizing a specified borderline sample had not been conducted until a study by Nigg et al.

(1991). Interrater reliabilities ranged from .78 to .88 in this study. The Early Memories Test is an interesting psychodynamic instrument that in its original form was the forerunner to Krohn's (1972) Object Representation Scale for Dreams. However, because it has remained relatively undeveloped, it lacks the standardization required for wider use.

Parental Representations. Blatt and his colleagues, who developed the most widely used Rorschach-based measure of object representations, have also developed an assessment device utilizing parental representation reports to measure the qualitative and structural dimensions of object representations (Blatt, Wein, Chevron, & Quinlan, 1979). The scale, based on cognitive and object relations theories, offers a way of objectifying the analysis of object differentiation from written descriptions of parents. Marziali and Oleniuk (1990) extended the coding system for parental representations based on the assumption that in each individual, all levels of differentiation are maintained, albeit in varying proportions. They tested their new coding method by contrasting borderline patients with nonpyschiatric subjects. Kappa coefficients for between-judge agreement ranged from .65 to .78 ($M$ = .71), and on conceptual level codes ranged from .61 to .68 ($M$ = .65).

## Summary of Construct Validity Findings

The empirical object relations assessment research has begun to contribute validating and disconfirmng data to a variety of psychoanalytic theory constructs. The overwhelming data in the recent research suggest the importance of delineating multiple dimensions of object relations rather than as a unitary phenomena. A number of constructs were consistently addressed in these studies validating the multiplicity of object relational dimensions in borderline samples with diagnostic, qualitative and therapeutic implications.

### Diagnostic Implications

Much of the emphasis in the research on assessing object relational phenomena in borderlines has been focused on definitional concerns, specifically by differentiating it from other diagnostic groups and defining borderline subtypes.

Borderlines Versus Schizophrenics, Neurotics and Normals. Twelve of the studies in this review attempted to differentiate borderlines from schizophrenics with object relational measures. There is much support in these studies for the construct of borderline personality disorder as a distinct entity apart from schizophrenia, as well as from neurosis. That is, borderlines exhibited a developmentally higher level of object representations than those of schizophrenics, but most were significantly more impaired

than neurotic or normal groups. Most of the 27 studies in this review contribute to the construct of a definitive borderline diagnosis in some way, as mentioned in the following sections. Therefore, only a few of the significant findings are noted.

On the CORP, Burke et al. (1986) demonstrated that schizophrenics, borderlines and neurotics were significantly differentiated at the .05 level of significance or better on all four scales and on the composite score. Neurotic patients showed a higher level of object constancy, object integration, subjectivity and appreciation than borderline patients, who displayed a higher level of each of these dimensions than schizophrenics. The Empathy dimension demonstrated the greatest power in differentiating the diagnostic groups. This suggests that an individual's ability to perceive and appreciate the other's view is the dimension of object relations theory which most powerfully distinguished mild from severe psychopathology. The capacity to establish a clear, distinct image of the other and to sustain an integrated view of the other are also suggested from this research as more characteristic of neurotic than severe psychopathology.

The research with the measures from the Mayman and Urist research group have provided strong evidence regarding the general theoretical notion that other than psychotics, borderlines are more pathological than various comparison

groups (Hymowitz, Hunt, Carr, Hurt, & Spear, 1983; Spear, 1980; Spear & Lapidus, 1981; Spear & Sugarman, 1984).

Spear (1980), in one of the first studies to use the composite score of the Blatt's DACOS scoring system, found a significant ($p < .01$) difference in the impairment of the developmental level of object representations between schizophrenic and borderline patients. As in previous studies on the psychopathological levels from schizophrenia to borderline to neurosis, there was a marked increase in the number of well-differentiated, highly articulated and fully integrated human figures on accurately perceived responses between groups. The pattern of lowest to highest object representational capacity was in the expected direction from schizophrenia to neurosis. An interesting finding of the Lerner and St. Peter (1984a, 1984b) studies using Blatt's scoring system was that high developmental levels for inaccurate responses typified severe borderline, as opposed to psychotic, pathology. That is, when borderlines violated the constraints of reality they often compensted for this regression by giving elaborate descriptions of the percept.

In their study of ego functions of borderlines and neurotics in individual and group therapy, Kretsch, Goren, and Wasserman (1984, 1987) found the Ego Function Assessment scale to distinguish significantly between the two groups on the object relations subscale. Other less frequently

utilized instruments, including the Psychoanalytic Rorschach Profile and the Bell Object Relations Inventory, have also demonstrated distinctions in their measures of object relational capacity between borderlines and schizophrenics (Bell et al., 1988; Burke et al., 1988).

Using his Separation-Individuation Theme Scale for Rorschach responses, Coonerty (1986) found that schizophrenic subjects gave significantly more preseparation-individuation responses ($p < .01$) than the borderlines and significantly fewer separation-individuation responses ($p < .05$). That is, in accord with psychoanalytic theory, the thematic quality of the object representations of schizophrenics was found to center around a more primitive level of development than borderlines.

In terms of early memories, Arnow and Harrison (1991) found that in comparison to paranoid schizophrenics and normals, borderlines reported the fewest positive memories ($p < .001$) and the most negative memories ($p < .001$). The neurotics, in contrast to borderlines and paranoid schizophrenics, appeared to have a predominantly positive-toned representational world.

The research comparing borderline samples with neurotics and normals has found strong support for the construct that the borderline diagnosis is a distinctly separate pathological entity with its own level and quality of object relational structures and themes (Goren et al.,

1985; Lerner & Lerner, 1983; Lerner & St. Peter, 1984a, 1984b; Marziali & Oleniuk, 1990). Using parental representation data, Marziali and Oleniuk (1990) found borderlines had significantly more responses at the lowest level of object differentiation ($p < .03$), while the nonpsychiatric group had significantly more responses at the highest levels of object differentiation ($p < .01$). Yet, results also indicated that even borderlines retain multiple levels of representations, supporting Kernberg's (1975) contention that borderlines have achieved higher levels of self-other differentiation; however, they also maintain primitive defenses that interfere with sustaining integrated object representations.

Borderlines Versus Depressives. Stuart et al. (1990), using Blatt's DACOS measurement, showed significant variance across diagnostic groups on content of interaction. This suggests that borderlines are as able as depressives and normals to ascribe motivation to object relational interaction and, in fact, may more quickly make motivational attributions than nonborderlines. However, borderlines are distinguished by their tendency to construe malevolent motivations by others. Using Blatt's DACOS instrument, Stuart et al. showed significant variance across diagnostic groups on the content of interaction. Borderlines portrayed interaction as more malevolent than normals ($p < .02$), and subjects who were diagnosed as both borderline and depressed

portrayed interaction as more malevolent than did normal subjects ($p < .05$). The investigators contended that these data support the construct that borderlines', depressives', and normals' perceptions of the quality of human interaction lie along a continuum running from malevolence to benevolence. They have also asserted that the correspondence of highly motivated action with malevolent interaction in the borderlines' Rorschach responses is related to a defensive projection of aggressive impulses and/or an assumption that others intend evil because of a persecutory object world. On the contrary, when normals and pure depressives perceived motives in human interactions on the Rorschach, benevolent intentions were the primary motivator.

Another study, utilizing Westen's ORSCS measure for the TAT, also demonstrated significant differences between borderlines, major depressives and normals (Westen, Lohr, Silk, Gold, & Kerber, 1990). Variability in cognitive functioning of borderlines was exhibited as the borderline subjects produced significantly less complex representations than normals, but nearly half of the borderlines produced multiple representations within the complex range. This suggests that representations produced by borderlines are at times cognitively quite primitive, whereas at other times they represent people in complex, and sometimes overly complex ways. The other important findings in this study

showed a significantly higher ($p < .01$) level of object differentiation, articulation and integration than did borderline subjects. This supports the clinical observations made by Kohut and Wolf (1978) and Mahler (1971) that the narcissistic individual has a greater degree of cohesiveness of the "self" than does the borderline individual. It is also in line with the clinical observation of Mahler and others of an incomplete differentiation of self from object in the borderlines, with the narcissists exhibiting a greater sense of separateness in interpersonal relationships (Kernberg, 1975; Mahler, 1971; Meissner, 1978; Rinsley, 1977).

Following Modell's (1963) suggestion that the concept of transitional object relatedness is one of the defining features of borderline personality, Cooper et al. (1985) compared Rorschach Transitional Object Scale (RTOS) scores of borderlines with an antisocial personality disordered group and a bipolar type II group. Results indicated a mild association between the borderline personality diagnosis and the reliance on transitional relationships, as well as a distinction between this group and the antisocial personality group on this object relational measure.

Borderline Subtypes. The empirical research assessing object relations appears to add an important dimension to the ongoing attempt to distinguish patterns and subtypes within the borderline range. Observing the content of the

expectations of the object world. If borderline disorder were simply a variant of a mood disorder the two groups would be more similar than they are on these measures. Depressed and nondepressed borderlines were also distinguished by the extent to which each group attributed intention to human and quasi-human objects.

Borderlines Versus Other Personality Disorders. The Bell et al. (1986,1988) studies compared borderlines with groups of subjects diagnosed with other types of personality disorders. The groups of other Axis II subjects had higher scores (more pathological) than other comparison groups on the object relation subscales of Alienation and Insecure Attachment. However, they could be significantly distinguished from borderlines by their lower scores on the Alienation and Egocentricity subscales. These findings imply that even though other types of personality disorders are characterized by alienation and painful interpersonal relations, they generally do not exhibit as manipulative or impaired in their object representations as those in the borderline group.

Farris (1988) attempted to demonstrate empirically the commonly noted (e.g. Kernberg, 1975; Kohut, 1971; Mahler, 1971) distinction between borderline and narcissistic personality disorders in terms of severity of disturbance, including object relational levels. Utilizing Blatt's DACOS instrument, Farris found that the narcissistic subject

were all in the predicted direction. That is, because of the cognitive constriction of those with depression, borderlines did not differ from them in mean scores on the two more cognitively oriented dimensions (complexity and social causality). However, borderlines did have lower mean scores on affect-tone and emotional investment, and produced more pathological responses on every scale, including the two cognitive scales reflecting more impaired object relations. Borderlines, in comparison to normals, also produced lower mean scores and more pathological responses on each scale.

Other studies, such as Bell et al. (1986, 1988), have shown significant differences between those with affective disorders and borderlines in their quality of object relations. Even though 89% of the inpatient borderlines in the Bell (1988) study had an Axis I diagnosis of affective disorder, borderlines had significantly more pathological scores ($p < .05$ or better) on each of the object relations subscales.

This research supports the argument, contrary to some previous assertions (Akiskal, 1981), that borderline personality disorder constitutes its own clinical entity (Gunderson & Elliot, 1985) apart from an affective disorder. According to the current research assessing object representations, depressed borderlines and depressed nonborderlines manifest significantly different affective

interaction between objects on projective measures has come to be a valuable method to highlight factors such as reality testing and defensive variables which may help draw distinctions between borderline groups.

One group of researchers (Spear, 1980; Spear & Lapidus, 1981; Spear & Sugarman, 1984) conducted a series of studies comparing two borderline types designated as "obsessive-paranoid" and "hysterical-impulsive," derived from Shapiro's (1965) description of "character types." Spear (1980) described the obsessive-paranoid borderline as the patient

> who presents a cognitively controlled and differentiated view of his relations with others, but has a very limited capacity for affective experience or expression. The content of his affective experience is found to be highly aggressive and malevolent and is marked by his dominant use of projection as a defense against such destructive impulses. (p. 333)

On the other hand, the hysterical-impulsive borderline (also referred to as the "infantile" borderline) patient

> experiences a broad and often overwhelming range of emotional responses in interpersonal transactions, but displays a weak structural capacity to modulate his experience. Regression and denial play significant roles in this patient's defensive structure and, as a result, the content of his interpersonal perceptions is often remarkably lacking in destructive/hostile reactions. (Spear, 1980, p. 333)

In attempting to differentiate borderline subtypes on an object representational level, these researchers followed the Blatt, Brenneis, Schimek, & Glick (1976) recommendation that "one must study the interaction of content and structure and that subsequent research should be directed

toward integrating our structural analysis with the content scoring system developed by Mayman" (p. 372). Therefore, with Rorschach and dream report data, they utilized Blatt's developmental/cognitive DACOS system to evaluate structural dimensions and Krohn and Mayman's (1974) psychoanalytic ORSD and Urist's (1977) MOAS instruments to measure the affective/thematic content of object representations.

In each of the three studies the structural dimensions failed to distinguish significantly between the two borderline groups, although there was a trend for the hysterical-impulsive group to have higher scores (all the borderlines were clearly more advanced developmentally than the schizophrenic comparison group). The thematic measures in these studies showed that the hysterical-impulsive borderline group operated at a healthier level of object relational functioning than the obsessive-paranoid group. The obsessive-paranoid borderline group was more similar to the schizophrenic patients with regard to their capacity for regressive patterns. This was because the obsessive-paranoid group consistently showed the greatest range of thematic object relational functioning. These studies provide clear support for the concept of subtypes within the borderline range, along with a promising delineation along the hysterical-impulsive and obsessive-paranoid lines.

Another dimension, the differentiation between inpatient and outpatient borderlines, was examined by Lerner

and St. Peter (1984a, 1984b) using Blatt's DACOS. In terms of object relations, significant differences were found between the inpatient and outpatient borderline groups on the differentiation and articulation dimensions. Malevolent content seemed to be the most critical dimension in distinguishing between the groups. The inpatient borderline group gave significantly more F- responses (poor form quality or reality testing) in malevolent interaction than did the outpatient borderline group. With the exception of one outpatient borderline subject, only the inpatient borderline group produced F- malevolent responses. According to the researchers, these results support the theory that the borderline diagnosis is on a continuum of severity and that outpatient borderlines can be distinguished from hospitalized borderlines along the dimensions of developmental level of the concept of the object, quality of reality testing and regressive potential.

Lerner and St. Peter (1984a, 1984b) also found that the outpatient borderline group gave significantly more quasi-human accurate responses than the inpatient borderline group. The quasi-human percept, [(H) or (Hd)], is considered a defensive form of distancing and dehumanizing (Exner, 1986). This finding indicated that the outpatient borderline individual demonstrates the greatest capacity (compared to the groups of neurotics, schizophrenics, and inpatient borderlines) to perceive objects accurately and

realistically, but only by distancing and dehumanizing them. The distortion and remoteness of the accurately perceived human-like figures given by the outpatient borderline group may be related to the defensive operations of idealization and depreciation which allow this type of patient to sustain reality testing and avoid regressive episodes. It appears the outpatient borderline may defend against malevolent objects without compromising reality testing by distancing from the objects in time and space. In contrast, the inpatient borderline seems unable to escape from malevolent objects due to a weaker defensive structure.

Only the Bell et al. (1988) study was unable to confirm differences in object relations scores between the inpatient and outpatient groups. But this may be accounted for by a possible sampling error. The inpatient sample was composed of 41 males and 3 females in a Veterans Administration hospital, while the outpatient sample consisted of 22 female and 2 males from a different setting.

Even though distinctions could not be made in this study on the inpatient versus outpatient dimension, it was able, nevertheless, to demonstrate range of pathology within the borderline sample with a variety of subscale patterns. The most common profile for borderlines showed elevated scores on the Alienation, Insecure Attachment and Egocentricity subscales. This profile would be typified by (a) an internal experience of lack of intimacy and loss of

basic trust, (b) relational patterns of clinging dependency and fear of object loss, and (c) a tendency to manipulate others for one's own self-centered aims. Another profile included elevated Alienation and Insecure Attachment subscales with a low Egocentricity subscale, suggesting that these borderlines were less likely to be as demanding and manipulative as others. A third common pattern had elevated Alienation and Egocentricity subscales without significant scores on Insecure Attachment, signifying those who would be less likely to agonize over relationships, but who would be more coldly manipulative and mistrustful. The final pattern was a single elevation of the Alienation subscale, indicating a less anguished and manipulative picture than other borderlines.

These results give additional empirical validation to previous findings which document the contradictory clinical picture exhibited by the borderline patient (Carpenter, Gunderson, & Strauss, 1977; Gunderson & Kolb, 1978; Gunderson & Singer, 1975), lending support to a distinction in levels of pathology within the borderline spectrum.

Borderline Adolescents. One study using the Westen ORSCS measure examined the TAT responses of a sample of borderline adolescents contrasted with nonborderline psychiatric and normal comparison adolescents (Westen, Ludolph, Lerner, Ruffins, & Wiss, 1990). In this study, the borderline adolescents were significantly distinguished from

the comparison groups on the basis of their object relations, as shown by a discriminant function analysis which correctly classified 75.9% of the subjects. The results also indicated a more malevolent object world (lower mean affect-tone) and a relative incapacity for mature emotional investment in relationships for the borderline sample. The borderline subjects also had a greater tendency towards egocentric and poorly differentiated representations, activation of exceedingly malevolent object representations, need-gratifying object relations, and grossly illogical attributions. An unexpected finding was that the borderline adolescents produced more complex representations of objects than subjects in either comparison group. The researchers suggested that, like previous Rorschach studies with adult borderlines, the developmentally advanced cognitive responses imply something other than preoedipal arrest for borderlines and a variability of functioning depending on level of affective arousal.

Another study by the Westen group (Westen, Ludolph, Silk, et al., 1990) compared object relations phenomena in samples of borderline adolescents and adults. The investigators attempted to determine if there were developmental differences between borderlines at different age levels. Using Westen's ORSC measure on the TAT, the one dimension of object relations hypothesized not to be

developmental (affect tone of relationship paradigms) showed no differences between the adolescent and adult groups. Two of the other three scales, expected to show developmental differences with age (complexity of representations of people, and capacity for emotional investment), showed significantly less mature responses by adolescents subjects at $p < .01$ and $p < .05$ levels respectively. The social causality scale approached significance at $p = .06$. This evidence suggests continued developmental progression of borderline phenomena from adolescence into adulthood. Westen believes this finding contradicts the commonly held psychoanalytic theory of borderline etiology being solely grounded in preoedipal arrest.

Finally, a study by Kelly (1986) compared groups of borderline, depressed and conduct-disordered female adolescents on two measures of object representations. He used Rorschach assessment procedures, including a modification of Blatt and Ritzler's (1974) Boundary Disturbance Scale and a frequency tabulation of the human percept response, H, and related variations, that is, (H), Hd, and (Hd). This investigation had low sample sizes for each group (10), but was still able to demonstrate significant impairment for borderline adolescents on one boundary disturbance measure--the confabulation response ($p < .01$). Clear indication of poorly articulated boundaries did not occur in the depressed or conduct-disordered

adolescents. This finding is consistent with adult research which shows that boundary disturbances are more routinely encountered in more disturbed patients (Blatt & Ritzler, 1974), including adolescent borderlines (Sugarman, S. Bloom-Feshbach, & J. Bloom-Feshbach, 1980). The borderline sample in this study also produced significantly fewer full human responses ($p < .05$), indicating a lower developmental level than comparison groups of personality organization and quality of object relations, and corresponding with the research on adult borderlines (Blatt & Lerner, 1983a, 1983b; Blatt, Wild, & Ritzler, 1976; Lerner, Sugarman, & Gaughran, 1981).

Descriptive/Qualitative Findings

In addition to indicators of diagnostic considerations, the current body of research assessing object relations phenomena also indicates consistent patterns in the quality of object representations. These qualitative findings appear to confirm and expand psychoanalytic descriptions of borderline disorders.

Cognitive Complexity. Despite the tendency for borderlines to produce poor levels of object representations, a number of studies (Lerner & Lerner, 1983; Lerner & St. Peter, 1984a, 1984b; Westen, Lohr, Silk, Gold, & Kerber, 1990; Westen, Ludolph, Lerner, Ruffins, & Wiss, 1990; Westen, Ludolph, Silk, et al., 1990) have reported the capacity for many borderlines to produce complex

representations. These results show the significance of focusing on the dynamic variability of object relations within individuals, rather than solely on levels of object relations as unbending structures. This shift in focus would necessitate more of an integration of classical psychoanalytic theory of momentary dynamic processes into object relations concepts, that is, a focus on present precipitators for relational functioning with current objects.

It has been suggested that the hypercomplexity or pseudocomplexity of borderline responses found throughout the research most likely reflects borderline patients' strong tendency to project features of their enduring object representations upon their experience of current relationships, including quick and intense transferences to therapists. Westen (1990) concluded that

> the cognitive structure of borderline object representations may be characterized by two opposite forms of pathology: a tendency to represent people in ways that are too shallow and developmentally primitive, and a tendency to represent people in overelaborated ways that are not shallow enough in the face of limited data. (pp. 680-681)

This is similar to the earlier Rapaport et al. (1945) observation that "preschizophrenics" tend to produce either overideational or bland, shallow responses to psychological tests, particularly the Rorschach.

It may be that the high developmental levels of inaccurate articulation by the inpatient borderline, that

is, their tendency to give elaborate, affectively charged descriptions on unrealistically perceived responses, may represent a desperate attempt by these patients to stabilize reality by overelaboration (Blatt & Shichman, 1983). Therefore, the use of complex representations may be a defensive function to protect against fragmentation or regression.

Affect Tone--Malevolence. Much of the evidence suggesting the prevalence of malevolent affect tones by borderlines has been noted previously. However, it is important to delineate this construct as a major qualitative descriptor found in the object relational assessment research. The consistent finding that borderlines perceive more malevolent intentions than schizophrenics seems at first to be at odds with the notion of borderline personality disorder as representing a higher developmental level. But a distinction between cognitive and affective components of object relational development must be made. As the Spear and Sugarman's (1984) research suggested, borderlines may be capable of the relatively complex social cognition necessary to attribute motivations to object representational actions, and to distinguish between passive and active involvement in an interaction. Current research on the history and family patterns of borderlines may point to the etiology of such a malevolent view of the world. It has been suggested that borderlines' construal of human

interaction as malevolent may be an indication of (a) developmental arrest prompted by the projection of aggressive impulses, (b) constitutional factors, and/or (c) an expectation of the object world shaped by interaction with neglectful, abusive or unempathic caretakers (Herman, Perry, & van der Kolk, 1989; Ludolph et al., 1990; Ogata et al., 1990; Zanarini, Gunderson, Marino, Schwartz, & Frankenburg, 1989).

A recent study by Nigg et al. (1991) showed an association between projective portrayal of injuries and malevolence in borderlines and reported childhood sexual abuse. This suggests that some portion of the borderline's malevolent object world may be related more specifically to sexual abuse than to the borderline diagnosis itself. Further study of interpersonal difficulties with respect to trauma history of borderlines may validate this finding. If it does, the history of trauma may need to be accounted for in the psychodynamic understanding of borderline object relations.

Separation-Individuation Themes. Coonerty (1986) attempted to validate the psychoanalytic developmental theory that borderlines show prominent separation-individuation themes by utilizing his Separation-Individuation Theme Scale on the Rorschach responses of borderline and schizophrenic samples. She found that the borderline subjects exhibited a predominance of separation-

individuation themes on the Rorschach responses. There was a marked tendency for borderlines to cluster around themes of narcissism and rapprochement, with preseparation themes almost as common. These results support the view that borderline development may have its origins in failures or weaknesses in early stages of development which inhibit the ability to establish object constancy and complete the separation process. The theoretical model of overlapping stages in the separation-individuation process was also supported. When the three subphases within the separation-individuation phase were analyzed, the two more developmentally advanced subphases (narcissism and rapprochement) maintained significance for the borderline diagnosis in comparison to the schizophrenic control group. But the earliest subphase (differentiation), being more of an overlap point on the developmental continuum, was not significant for either diagnosis. Borderline and schizophrenic samples gave almost equal proportions of early differentiation responses.

Hirshberg (1989) contributed more empirical support to the theory that borderline disorders have core symbiotic and separation yearnings and conflicts. Even though the criteria for differentiating between borderline and nonborderline groups should have been more stringent in this study, the borderline group's Rorschachs showed a prevalence of symbiotic-type responses, producing more separation and

counter-symbiotic responses ($.05 < p < .10$) than the nonborderline group. Also, higher frequencies ($p < .05$) were found in the borderline group for integrity-compromised symbiotic responses and for each of the four types of separation responses.

Psychotherapy Outcome

Few studies have measured object relational changes as a result of treatment with borderlines. Kretsch et al. (1987) using Bellak's Ego Function Assessment evaluated borderlines and neurotics at third and fourth year intervals of their participation in individual and group psychotherapy. The investigators found significant improvement in object relations ego functioning for both groups at the fourth year interval of individual therapy. For group therapy participants only the borderline group had significant improvements in object relations at the follow up evaluation. Frieswyk and Colson (1980) used several object representational scales with Rorschach data including Krohn and Mayman's Object Representational Scale for Dreams, Pruitt and Spilka's Empathy-Object Relations scale, and a tally of the number of human movement responses (M). On a follow-up study conducted approximately 2 years following patients' hospital treatment, Frieswyk and Colson found low positive correlations ($p < .10$) with global improvement for the borderline sample on each of the object relational measures. More significant levels of treatment outcome

($p < .05$ and $p < .01$) were indicated by the human movement response (M) as a predictor of upward shifts in overall health-sickness, quality of interpersonal relations, and impulsivity. These data emphasize the inference that the patient's ability to internally represent cooperative interactions with others may be significant in treatment outcome.

## Methodological Issues

Many of the earlier studies on assessment of object relations with borderlines suffered from methodological problems such as (a) small sample sizes (Burke et al., 1988; Burke et al., 1986; Hirshberg, 1989; Lerner & Lerner, 1983; Marziali & Oleniuk, 1990), (b) no systematic attempt to establish the reliability or validity of the diagnoses assigned (Burke et al., 1988; Burke et al., 1986; Farris, 1988; Kretsch et al., 1984, 1987; Lerner & St. Peter, 1984a, 1984b), (c) few correlations with nontest data such as clinician's ratings or behavior checklists (Burke et al., 1988; Burke et al., 1986; Coonerty, 1986; Cooper, Perry, Hoke, & Richman, 1985; Goren et al., 1985; Kretsch et al., 1984), and (d) the use of scales with unproven reliability and validity (Arnow & Harrison, 1991; Burke et al., 1988; Coonerty, 1986; Cooper et al., 1985; Hirshberg, 1989). Some of these difficiencies reflect inconsistencies within the field with respect to both the diagnosis of borderline

personality disorder and the definition of object relational concepts to be measured. In addition, there are inherent difficulties in standardizing and validating projective instruments.

Many of the instruments used in these studies have only begun to establish adequate validity and psychometric properties, and therefore the results must be interpreted cautiously. In relation to the development of object relations measures, more attention needs to be given to test construction theory, keeping in mind the problems inherent in assessing unconscious constructs. Approaches to reliability, other than interscorer reliability, have been rare. There have been few attempts to measure either the stability or internal consistency of these measures. Sole reliance on traditional approaches to establishing validity has not been appropriate. The nature of the evidence for construct validity research with object relations measures must be expanded to take into account the phenomena of unconscious derivatives.

The problem of accurate diagnosis is also an important issue. Various studies diagnose borderlines using a variety of methods. Sometimes the diagnosis was merely taken from the patient's chart. Twelve of the 27 studies used only DSM-III or DSM-III-R criteria for diagnosis, while only 7 used a combination of diagnostic criteria, including the Diagnostic Interview for Borderlines, Kernberg's Structural

Interview, and other objective instruments. Ideally, both Axis I and Axis II diagnoses should be established using standardized procedures such as structural interviews and consensual diagnosis between evaluators.

Although most of the studies reported significant indicators of object relational patterns with borderlines, there has been little indication or attention given in the studies regarding the measures' predictive powers. Consequently, it is difficult to determine the clinical utility of an instrument. Increased use of multivariate statistical procedures, such as discriminant analysis, would provide greater assurance of the tests' sensitivity and specificity of object relational factors with a borderline population.

## Future Research

The need continues for highly reliable and valid instruments which can adequately measure the structural and thematic spectrum of object relations phenomena with borderlines. Future research should continue the recent focus on understanding the conditions under which borderlines manifest problematic or pathological object relations. A borderline may not exhibit borderline symptomotology continuously, yet little has been documented regarding the momentary activating conditions for pathological borderline processes.

This present writer agrees with the Westen (1990) proposal to continue the exploration of pathogenic experiences for borderline pathology beyond the preoedipal period, as some research has suggested developmental differences in object representations between borderline adolescents and adults (Westen, Ludolph, Silk, et al., 1990), while other findings seem to support preoedipal developmental themes (Coonerty, 1986).

The research clearly indicates that borderlines form a heterogeneous population. Therefore, more studies need to be conducted on subtypes of borderlines with a view to further delineation of the range of pathology within the borderline spectrum. In some cases research results may be specific to the borderline subtype which makes up a given sample. Spear's (1980) study is a good example of separating out Schizotypal Personality Disorder, commonly referenced in the literature as one of the two classifications of borderline organization in the DSM-III-R. In addition, some of the variance attributed to borderlines may be due to the common occurence of concurrent diagnoses. In the future, greater clarity will be required both to partial out the effect of borderline personality disorder from that of concurrent disorders, and to specify which borderline subtype is being studied. Also, comparing subtypes of borderlines with developmental histories of the individual may be helpful in delineating etiology of the

variety of borderline themes. Making such distinctions should have important implications for treatment planning and confirmation of theoretical constructs of borderline pathology.

More psychotherapy outcome studies need to be conducted in the future. With such limited research indicated in this review, more investigation is called for into the changes in the content and structure of object representations as a function of short- and long-term psychotherapeutic treatment with borderlines.

The choice of stimuli for the assessment of object relations is an important methodological consideration in future research. Clearly, object relations can only be inferred and measured through derivatives and cannot be directly assessed. The present state of research seems to indicate that content approaches are more descriptive, whereas structural data contribute more to understanding the level of pathology. It is important that future studies utilize measures examining both the content and structural dimensions of object representations in order to obtain a more comprehensive picture of the object relations phenomena with borderlines.

The use of a variety of instruments will also be important in future studies to elicit the widest breadth possible of object relations phenomena within each group of borderlines. It will be equally important to study whether

there is a hierarchy of effective stimuli for eliciting object relations phenomena--from such instruments as the CORP and TAT that include concrete, human, interpersonal interactions, to other data such as early memories, dreams, Rorschach, and interviews. The question is whether the approaches using stimuli specifically designed to assess object relations phenomena are less likely to be contaminated than an instrumemt, such as the Rorschach, which includes a multitude of other information. Further, research comparing CORP, DACOS, and TAT (ORSCS) results with borderlines could provide some important information on the interrelationships of these valuable instruments.

The scoring methods are rather cumbersome for many of these instruments, making it unattractive for the average clinician to use them at this stage of development. However, continuing research may improve the empirical and clinical value of the scales and justify their use. As a general statment, the current state of research on the assessment of object relations phenomena with borderlines is considered still to be in its early developmental stages. However, a good foundation has been laid for future studies. Continuing developments in the research, as outlined above, should help contribute to the validation process of the psychoanalytic theory of borderline phenomena as a discrete entity, differing from other diagnostic groups, as well as to differentiation between the types of borderline character

pathology. Such research would also have important implications for delineating treatment strategies for patients within the borderline spectrum.

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